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EXAMINER

TANG, KENNETH

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,271

Applicant(s)

SPENCER ET AL.

Examiner

Kenneth Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-18 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 recites the limitation "said clusters" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 12, 13, 14, 15, 16, 17, and 18 are directed to method steps which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps because it is not tangible. The examiner suggests applicant to change "method" to "computer implemented methods" in the preamble to overcome the outstanding 35 U.S.C. 101 rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 8-17 are rejected under 35 U.S.C. 102(b) as being anticipated by MacCormack et al. (hereinafter MacCormack) (US 6,144,797).

5. As to claim 1, MacCormack teaches a dynamic imaging server comprising:

a. parser (*col. 54, lines 38-42*);

a job processor that receives parsed commands from the parser and executes the commands in the form of a job to perform a plurality of operations (step 1676 of Fig. 74) (*col. 54, lines 38-42*);

at least one image processing engine that performs an operation in response to a command received by the job processor from the parser to process image data (archive manager software component) (*step 1678, Fig. 74*); and

a formatter that receives the processed image data and formats the processed image data into a desired format (translates commands in a suitable format) (*col. 25, line 50 and col. 31, lines 37-41*).

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6. As to claim 2, MacCormack teaches a dynamic imaging server further comprising a script execution engine capable of executing code during execution of the job by the job processor (*col. 9, lines 59-62*).

7. As to claim 3, MacCormack teaches a dynamic imaging system comprising:
a storage device (*col. 16, lines 9-19, col. 73, lines 15-40*);
a dynamic imaging server coupled to a storage device (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*);
a database accessible by the dynamic imaging server (*col. 38, lines 22-42*); and
a network server (*master node facility 510*).

8. As to claim 4, MacCormack teaches a dynamic imaging system where the dynamic imaging server comprises:
a parser (*col. 54, lines 38-42*);
a job processor that receives parsed commands from the parser and executes the commands in the form of a job to perform a plurality of operations (step 1676 of Fig. 74) (*col. 54, lines 38-42*);

at least one image processing engine that performs an operation in response to a command received by the job processor from the parser to process image data (archive manager software component) (*step 1678, Fig. 74*); and

a formatter that receives the processed image data and formats the processed image data into a desired format (*col. 25, line 50 and col. 31, lines 37-41*).

9. As to claim 5, MacCormack teaches a dynamic imaging system wherein the dynamic imaging server further comprises a script execution engine capable of executing code during execution of the job by the job processor (*col. 9, lines 59-62*).

10. As to claim 6, MacCormack teaches a dynamic imaging system as claimed in claim 3, further comprising a synchronization engine coupled to the storage device (*synchronizing signal generator 1106*).

11. As to claim 8, MacCormack teaches a dynamic imaging system comprising:

at least one cluster, said cluster including:

at least one cluster master device (master node); and

at least one cluster slave device (local node);

wherein the cluster master device comprises:

a storage device (*col. 16, lines 9-19, col. 73, lines 15-40*);

a dynamic imaging server coupled to a storage device (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*);

a database accessible by the dynamic imaging server (*col. 38, lines 22-42*);

a network server (*master node facility 510*); and

a cluster engine (*VRPL unit, etc., Fig. 103A*);

wherein the cluster slave device includes:

a storage device (*col. 16, lines 9-19, col. 73, lines 15-40*);

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a dynamic imaging server coupled to a storage device (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*); and

a network server (*master node facility 510*); and

wherein the cluster engine (*VRPL unit, etc., Fig. 103A*) manages a flow of image requests between the cluster master and the cluster slave (*col. 70, lines 25-45*).

12. As to claim 9, MacCormack teaches a dynamic imaging system wherein the dynamic imaging server of the cluster master and the dynamic imaging server of the cluster slave each comprise:

a parser (*col. 54, lines 38-42*);

a job processor that receives parsed commands from the parser and executes the commands in the form of a job to perform a plurality of operations (step 1676 of Fig. 74) (*col. 54, lines 38-42*);

at least one image processing engine that performs an operation in response to a command received by the job processor from the parser to process image data (archive manager software component) (*step 1678, Fig. 74*); and

a formatter that receives the processed image data and formats the processed image data into a desired format (*col. 25, line 50 and col. 31, lines 37-41*).

13. As to claim 10, MacCormack teaches wherein the dynamic imaging server of the cluster master and the dynamic imaging server of the cluster slave each further comprise a script execution engine capable of executing code during execution of the job (*col. 9, lines 59-62*).

14. As to claim 11, MacCormack teaches further comprising a plurality of said clusters (*col. 14, lines 29-41*).

15. As to claim 12, MacCormack teaches a method of providing dynamic imaging, said method comprising:

parsing an image request into a job comprising a plurality of commands (step 1676 of Fig. 74) (*col. 54, lines 38-42*);

processing the commands to perform a plurality of operations, wherein the operations generate image data that is responsive to the request (archive manager software component) (*step 1678, Fig. 74*); and

formatting the image data (*col. 25, line 50 and col. 31, lines 37-41*).

16. As to claim 13, MacCormack teaches a method of providing dynamic imaging, said method comprising;

providing at least one dynamic imaging cluster including at least one cluster master (master node) and at least one cluster slave (local node) (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*);

analyzing an image request with a cluster engine to select either the cluster master or the cluster slave to process the image request (*col. 70, lines 25-45*);

processing the image request with either the selected cluster master or the selected cluster slave (archive manager software component) (*step 1678, Fig. 74*).

17. As to claim 14, MacCormack teaches wherein the selected cluster master or the selected cluster slave processes the image request by:

parsing an image request into a job comprising a plurality of commands (step 1676 of Fig. 74) (*col. 54, lines 38-42*);

processing the commands to perform a plurality of operations, wherein the operations generate image data that is responsive to the request (archive manager software component) (*step 1678, Fig. 74*); and

formatting the image data (*col. 25, line 50 and col. 31, lines 37-41*).

18. As to claim 15, MacCormack teaches a method of providing dynamic imaging, said method comprising:

providing a plurality of dynamic imaging clusters, wherein each dynamic image processing cluster includes at least one cluster master (master node) and at least one cluster slave (local node) (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*);

analyzing an image request with a cluster engine to select which of the plurality of dynamic image processing clusters will process the request (*col. 70, lines 25-45*);

forwarding the request to the selected dynamic image processing cluster (*col. 70, lines 25-45*); and

processing the image request with the selected dynamic imaging processing cluster (archive manager software component) (*step 1678, Fig. 74*).

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19. As to claim 16, MacCormack teaches wherein the selected dynamic imaging cluster processes the request by:

providing at least one dynamic image processing cluster including at least one cluster master (master node) and at least one cluster slave (local node) (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*);

analyzing an image request with a cluster engine to select either the cluster master or the cluster slave to process the image request (*col. 70, lines 25-45*);

processing the image request with either the selected cluster master or the selected cluster slave (archive manager software component) (*step 1678, Fig. 74*).

20. As to claim 17, MacCormack teaches wherein the selected cluster master or the selected cluster slave processes the image request by:

parsing an image request into a job comprising a plurality of commands (*step 1676 of Fig. 74*) (*col. 54, lines 38-42*);

processing the commands to perform a plurality of operations, wherein the operations generate image data that is responsive to the request (archive manager software component) (*step 1678, Fig. 74*); and

formatting the image data (*col. 25, line 50 and col. 31, lines 37-41*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacCormack et al. (hereinafter MacCormack) (US 6,144,797).

22. As to claim 7, MacCormack discloses a cache memory 1070 along with a dynamic imaging server for processing (*col. 3, lines 30-45, col. 4, lines 57-67, col. 5, lines 7-26*).

MacCormack does not explicitly state the processing of the dynamic imaging server involve the cache. However, it would be obvious to one of ordinary skill in the art of memory to perform the processing using a cache because it would increase the speed and efficiency of processing.

23. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacCormack et al. (hereinafter MacCormack) (US 6,144,797) in view of Chow et al. (hereinafter Chow) (US 6,754,785 B2).

24. As to claim 18, MacCormack teaches wherein at least one of the dynamic imaging clusters comprises a user cluster. However, MacCormack fails to explicitly teach a third or external party cluster that is utilized to provide overflow capacity processing for the user cluster. Chow teaches a data transferring network that uses an external memory as a backup to any overflowed storage capacity (*col. 7, lines 25-49*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a third or external

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party cluster that is utilized to provide overflow capacity processing for the user cluster to the existing data transferring system of MacCormick because it would provide fault-tolerance and a real-time streaming backup of data stored in memory without adversely affecting the data network or attached data processing systems (*col. 3, lines 64-67*).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
6/27/05


LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER